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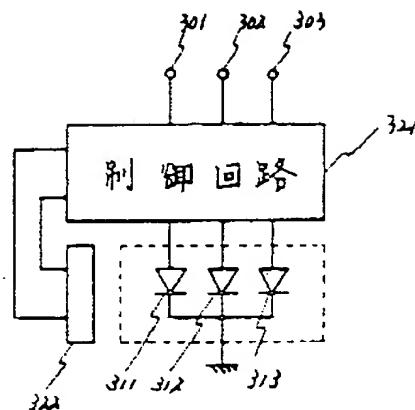
APPLICATION DATE : 25-02-88  
 APPLICATION NUMBER : 63042714

APPLICANT : SEIKO EPSON CORP;

INVENTOR : TAKAMURA TAKASHI;

INT.CL. : H01S 3/133

TITLE : AUTOMATIC OUTPUT CONTROL  
 CIRCUIT FOR LASER DIODE



ABSTRACT : PURPOSE: To apply an APC to discrete lasers of a multi-beam laser by providing a temperature detector which outputs a signal output for controlling a driving current value from an automatic output control (APC) circuit fed to a laser diode.

CONSTITUTION: A control circuit 321 drives laser diodes 311-313, and is so driven as to obtain optical outputs corresponding to the inputs to input terminals 301-303. A temperature sensor 322 monitors the case temperatures of the diodes 311-313, and applies case temperature information to a control circuit 321. Normally, temperature dependency is provided in the relationship between the driving current and the optical output of the diodes, and it is necessary to increase the driving current by approx. 1mA per 1°C of temperature rise so as to maintain the optical output constant. Since the characteristic for compensating the property is incorporated in the circuit 321, the diodes 311-313 obtain optical outputs corresponding to the inputs of the input terminals 301-303 irrespective of the case temperatures of the lasers.

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